Application No.: 09/727,207 Docket No.: RD8120USNA

AMENDMENTS TO THE SPECIFICATION

Please amend the specification as indicated below:

At page 2, please amend the paragraph beginning at line 10 and extending through line 21 to read as follows:

--Accordingly, in view of the foregoing it is believed desirable to provide a process, which utilizes a binder material with a relatively low melting point so that the binder can be processed at [[a]] temperatures under the critical temperatures that adversely affect the pile material. The process should, at the same time, be practiced in a physical environment in which pressure may be brought to bear on the pile to cause the thermoplastic binder to propagate without crushing of the pile. It is believed to be of further advantage to achieve this result while the pile surface structure is subjected to usual industry finishing processes, such as scouring, dyeing and drying. --.

At Page 4, please amend the paragraph beginning at line 25 and extending to page 2, line 2 to read as follows:

-- As the adjacent needles draw the threads downwardly toward the backing 14, the dispensed length of yarn becomes trained over the surface of the sinker finger, thereby forming a laid-in pile yarn element 16 overlying above the first surface 14S of the backing 14. Continued downward movement of each needle through the backing 14 forms an underlap portion 20U of a chain stitch ~~20~~. The underlap 20U of the stitch ~~20~~ secures the pile yarn element 16 against the first surface 14S. Each stitch ~~20~~ also includes an interlockable looped overlap portion 20L that lies against the bottom surface ~~14B~~ 14L of the backing 14. Sequential overlap portions 20L typically interlock with each other, chain-fashion, longitudinally along the bottom surface ~~14B~~ 14L of the pile surface structure 10. --.

At page 5, please amend the paragraph beginning at line 3 and extending through line 13 to read as follows:

--In a loop pile embodiment illustrated in Figure 1 the pile element 16 has the form of an inverted loop 16L that overlies the top surface 14S of the backing between a first generally U-shaped root portion 16R-1 located in a first longitudinally extending stitch line and a second

generally U-shaped root portion 16R-2 located in a second longitudinally extending stitch line. The root portions 16R-1, 16R-2 are each held against the top surface 14S of the backing 14 by the underlap portion 20U of one of the stitches ~~20~~. The underlaps 20U constrict the pile yarn to form distended regions 16D in the vicinity of each underlap 20U.--.

At page 7, please amend the paragraph beginning at line 29 and extending through page 8, line 8 to read as follows:

--After the primary binder powder (or the mixture of the primary binder powder and the secondary thermoplastic adhesive powder) is applied, the backing is heated to a predetermined temperature. This heating step is generally indicated by the reference character 30. Any suitable heating device may be used to implement the heating step, such as an oven, a radiant heater or a hot gas heater. The predetermined temperature to which the backing 14 is heated is dependent upon whether the binder powder alone or the powder mixture is applied to the surface 14S. If only a primary binder powder is applied to the surface 14S, the backing 14 is heated to a temperature slightly (on the order ~~if~~ of a few degrees) greater than the melting point of the primary binder powder, thus melting the primary powder binder and attaching the same to the backing 14. After solidifying downstream of the heating device, a layer of the primary powder binder (indicated by the reference character 24L in Figure 3A) is attached over the surface 14S of the backing 14.--.

At page 8, please amend the paragraph beginning at line 19 and extending through line 31 to read as follows:

--The backing 14 with the binder material 24L, 24L' applied to the surface 14S thereof is next stitched, as indicated by the reference character 32, using a stitching apparatus such as the one described above. In the stitching apparatus, the pile elements 16 are formed on the backing 14 in the manner above discussed. Accordingly, as illustrated in Figures 3A or 3B, at the reference point R at the outlet of the stitching apparatus the upper surface 14S of the backing 14 has an array of pile elements 16 formed thereover. The root portions 16R of the pile elements 16 are attached to the backing 14 by the underlaps 20U of the stitches ~~20~~. The surface 14S of the backing has a layer 24L, 24L', as the case may be, of binder disposed thereon.--

At page 10, please amend the paragraph beginning at line 25 and extending through page 11, line 2 to read as follows:

--In another embodiment of the invention the temperature at which the flexing occurs is maintained by passing steam or a heated gas having a temperature greater than the melting point of the binder over the pile surface structure 10. An example of a suitable apparatus 54 for this purpose is illustrated in stylized diagrammatic form in Figure 5. The apparatus 54, generally similar to a standard vertical steamer apparatus, includes an enclosure ~~56~~ having entrance port 56P and exit port 56P' defined in the walls thereof. Roller elements 58 and/or fixed abutments 60 (if desired) are mounted within the enclosure ~~56~~. The rollers 58 and the abutments 60 may be any suitable configuration to effect the action to be described. For example, as suggested in Figure 5, the rollers 58 (which may be implemented as rotatably mounted bars) may be circular while the abutments 60 may be pyramidal in cross section.—

At page 11, please amend the paragraphs beginning at line 3 and extending through line 13 to read as follows:

--In operation, a length of pile surface structure 10 is threaded over the rollers 58 and the abutments 60. The pile surface structure 10 is drawn through the enclosure ~~56~~ by the action of a pair of nip rolls 62 disposed in a convenient location, such as adjacent to the exit port 56P'. Preferably, those rollers 58 which interface against the pile elements 16 (i.e., the lower rollers 58 in Figure 5) have pins 58P which penetrate into the upper surface 14S of the backing 14, to avoid crushing of the pile elements 16. The other rollers engage the bottom surface ~~14B~~ 14L of the backing 14. The nip roll 62 may also be provided with pins 62P, if desired.

At page 11, please amend the paragraphs beginning at line 14 and extending through line 13 to read as follows:

--The pile surface structure 10 is drawn into and through the enclosure ~~56~~ by the action of the nip rolls 62, as indicated by the reference arrows 64. The pile surface structure 10 is thus conveyed, in serpentine fashion, over and under the rollers 58 and/or the abutments 60 mounted within the enclosure ~~56~~. At the same time the pile surface structure 10 within the enclosure ~~56~~ is subjected to a flow of steam or hot gas (such as hot air) introduced into the enclosure, as from suitable jets 66 provided for that purpose. The temperature of the steam or hot gas is sufficient to melt the binder material on the pile surface structure 10.—.

At page 12, please amend the paragraph beginning at line 1 and extending through line 5 to read as follows:

--Yet further, a second pairs of nip rolls 68 (with pins 68P) may be mounted within the enclosure ~~56~~. These nip rolls 68 serve to force a length of the pile surface structure 10 into a U-shaped region defined between plates 70 and thus, further flexing the pile structure 10.--.

At page 15, please amend the paragraph beginning at line 7 and extending through line 14 to read as follows:

--After stitching 32 (and scouring 36, if desired) a slurry similar to that described in connection with Figure 2A is applied to the bottom surface of the pile surface structure, as illustrated by the block 26. The liquid penetrates through the backing 14' to reach the vicinity of the root portion 16R of the loops 16L. The resulting pile surface structure, wherein the liquid binder permeates the structure as indicated by the waved lines ~~24L^3~~ 24^3, is illustrated in Figure 3H.--